



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO.                                                                                         | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---------------------------------------------------------------------------------------------------------|-------------|----------------------|---------------------|------------------|
| 09/727,096                                                                                              | 11/29/2000  | Dennis L. Montgomery | 042503-0261928      | 6817             |
| 27498 7590 09/14/2011<br>PILLSBURY WINTHROP SHAW PITTMAN LLP (SV)<br>P.O. BOX 10500<br>MCLEAN, VA 22102 |             |                      |                     |                  |
| EXAMINER<br>TRUONG, CAM Y T                                                                             |             |                      |                     |                  |
| ART UNIT                                                                                                |             | PAPER NUMBER         |                     |                  |
| 2169                                                                                                    |             |                      |                     |                  |
| NOTIFICATION DATE                                                                                       |             | DELIVERY MODE        |                     |                  |
| 09/14/2011                                                                                              |             | ELECTRONIC           |                     |                  |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docket\_ip@pillsburylaw.com

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

---

*Ex parte* DENNIS L. MONTGOMERY

---

Appeal 2009-012746  
Application 09/727,096  
Technology Center 2100

---

Before ALLEN R. MacDONALD, DAVID M. KOHUT,  
and BRUCE R. WINSOR, *Administrative Patent Judges*.

WINSOR, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant appeals under 35 U.S.C. § 134(a) from a Final Rejection of claims 2-4, 6-7, 11, 14, 16-21, 29,47, and 54. Claims 1, 5, 8-10, 12-13, 15, 23-25, 27-28, 30-46, 48-53, 55-73 are cancelled. Claims 22 and 26 are indicated as reciting allowable subject matter (Ans. 10). The Examiner has withdrawn the rejection of claims 4, 7, 19, and 54 (Ans. 3) and indicated that these claims recite allowable subject matter (Ans. 10). Claims 2-3, 6, 11, 14, 16-18, 20, 21, 29, and 47 remain rejected and on appeal. We have jurisdiction under 35 U.S.C. § 6(b).

We reverse.

#### STATEMENT OF THE CASE

Appellant's invention relates to a method for encoding and decoding information, and more particularly to a method of encoding using multiple passes and decoding in a single pass (Spec. 1:6-7). Claim 17, which is illustrative of the invention, reads as follows (emphasis added):

17. A method of operating upon digital data comprising the steps of:
- partitioning the digital data into a plurality of blocks;
  - creating a plurality of first threads, such that each first thread includes at least one of the plurality of blocks; and
  - operating upon each of the plurality of first threads to obtain a plurality of compressed first threads, each compressed first thread including at least one compressed block of digital data;*
  - operating upon each of the compressed first threads to eliminate each of the compressed first threads and retain the compressed first blocks;

creating a plurality of second threads, such that each second thread includes at least one of the plurality of compressed first blocks; and

*operating upon each of the plurality of second threads to obtain a plurality of compressed second threads, each compressed second thread including at least one compressed second block of digital data.*

The Examiner relies on the following prior art in rejecting the claims:

|       |              |               |
|-------|--------------|---------------|
| Simms | US 5,586,280 | Dec. 17, 1996 |
|-------|--------------|---------------|

|          |              |               |
|----------|--------------|---------------|
| Morikawa | US 6,043,897 | Mar. 28, 2000 |
|----------|--------------|---------------|

|       |                 |              |
|-------|-----------------|--------------|
| Johns | US 6,366,289 B1 | Apr. 2, 2002 |
|-------|-----------------|--------------|

Eugene Ageenko and Pasi Fränti (Ageenko), *"Forward Adaptive Modeling for Context-based Compression of Large Binary Images in Applications Requiring Spatial Access,"* 3 Proceedings 1999 International Conference on Image Processing 757-761 (IEEE Oct. 24, 1999).

Claims 2-3, 6, 16-18, 20-21, 29, and 47 stand rejected under 35 U.S.C.

§ 103(a) as unpatentable over Ageenko in view of Johns.

Claim 11 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Ageenko and Johns in view of Simms.

Claim 14 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Ageenko and Johns in view of Morikawa.

Rather than repeat the arguments here, we make reference to the Brief (filed April 24, 2007) and the Answer (mailed Aug. 9, 2007) for the respective positions of Appellant and the Examiner.

## ISSUE

The pivotal issue presented by Appellant's contentions is: Does Ageenko teach or suggest compressing blocks of digital data twice as recited in claim 17 (see italicized recitations *supra*)?

## ANALYSIS

The Examiner finds that Ageenko teaches a compression process in which blocks of digital data are compressed and then the compressed blocks of data are again compressed (Ans. 4-6; see also Ans. 10-13). The Examiner states:

Ageenko specifically teaches "compressing already compressed data" in page 759. In section 3.1, under "Model construction" heading, Ageenko teaches a "first stage", with "indices for all possible context from the model table, which is stored in the beginning of a compressed file". Here, "storing in compressed files," indicates the first compression.

In section 3.2, under the "Compression-decompression" heading, Ageenko teaches, "in the second stage, the clusters are compressed separately by the QM-coder", and that, "the compression is essentially the same as in sequential JBIG." This of course, indicates the second compression (compression of data already compressed in stage 1.)

Additionally, the Examiner notes that in the last paragraph of his document, under the "Forward-adaptive technique" heading (page 759, lines 3-4), Ageenko states, "the compression requires two passes over the image but decompression can be performed with one pass only", which not only reads on "compressing the already compressed" data, but also matches the exact same phrases used in the instant application as described in the Title of the Application: METHOD AND APPARATUS FOR ENCODING INFORMATION USING MULTIPLE PASSES AND DECODING IN A SINGLE PASS, and the Field of the Art section: "The present invention method and apparatus for encoding and decoding information, and more particularly to a method of encoding using multiple passes and decoding in a single pass."

(Ans. 11.)

The Appellant contends that the Examiner has misinterpreted Ageenko (Br. 5). More particularly, Appellant contends:

Clearly, the model is used not for compression, but for another purpose. As explicitly taught above, the model is used to re-initialize pointers "when the compression of a cluster starts." There is no teaching or suggestion that a cluster is twice compressed. And Ageenko in Section 3.2 reaffirms this, teaching "[I]n the second stage, the clusters are compressed separately by the QM-coder."

Applicant notes, respectfully, that with respect to the Examiner's reference in Section 3.1 to a "compressed file," the teaching here is that the model table that is stored at the beginning of a compressed file (which compressed file is the file that results from the compression that is performed in Section 3.2). This model table is not that data from the clusters that is being compressed. Rather, the model contains probabilities that allow for the "fast-attack states," which the "forward adaptive technique of Ageenko uses to speed up the overall time that is used for compression. While there may be advantages to this approach, the approach is not that of the present invention.

(*Id.*)

We agree with Appellant, for the reasons stated by Appellant (Br. 4-5). Although the Examiner correctly finds that Ageenko teaches compressing clusters of pixels (i.e., blocks of digital data) using two passes over an image (i.e., digital data) (Ans. 13), we find that Ageenko does not teach or suggest that the first pass includes an operation to compress the clusters, and that Ageenko only teaches compressing clusters during Ageenko's second pass over the image.

Accordingly, we do not sustain the rejection of claim 17 or of claims 2-3, 6, 11, 14, 16, 18, 20, 21, 29, and 47, which depend from claim 17

DECISION

The decision of the Examiner to reject claims 2-3, 6, 11, 14, 16-18, 20, 21, 29, and 47 is reversed. The rejections of claims 4, 7, 19, and 54 are reversed *pro forma*.

REVERSED

ELD